

## WEST Search History

DATE: Wednesday, June 01, 2005

<b>Hide?</b>	<b>Set Name</b>	<b>Query</b>	<b>Hit Count</b>
		<i>DB=PGPB,USPT,DWPI; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L5	fruebis adj joachim	12
<input type="checkbox"/>	L4	erickson adj mary	9
<input type="checkbox"/>	L3	bihain adj bernard	28
<input type="checkbox"/>	L2	yen adj frances	8

END OF SEARCH HISTORY

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	8	yen adj frances	US-PGPUB; USPAT; DERWENT	OR	ON	2005/06/01 11:48
L4	28	bihain adj bernard	US-PGPUB; USPAT; DERWENT	OR	ON	2005/06/01 11:48
L5	9	erickson adj mary	US-PGPUB; USPAT; DERWENT	OR	ON	2005/06/01 11:49
L6	12	fruebis adj joachim	US-PGPUB; USPAT; DERWENT	OR	ON	2005/06/01 11:49

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(FILE 'HOME' ENTERED AT 10:43:10 ON 01 JUN 2005)

FILE 'CAPLUS, MEDLINE, BIOSIS' ENTERED AT 10:43:36 ON 01 JUN 2005

L1 1 S LSR AND COMPOUND AND MODULATION AND OBESITY  
L2 9 S LSR AND OBESITY  
L3 25658 S LIPOLYSIS  
L4 2625 S L3 AND OBESITY  
L5 82 S L4 AND MODULATION  
L6 12 S L5 AND COMPOUND  
L7 10 DUP REM L6 (2 DUPLICATES REMOVED)

L7 ANSWER 1 OF 10 MEDLINE on STN

TI Dietary calcium and dairy **modulation** of adiposity and **obesity** risk.

PY 2004

AU Zemel Michael B; Miller Sharon L

TI Dietary calcium and dairy **modulation** of adiposity and **obesity** risk.

AB Dietary calcium plays a key role in the regulation of energy metabolism and **obesity** risk. This appears to be mediated primarily by dietary calcium **modulation** of circulating calcitriol, which in turn regulates adipocyte intracellular calcium ([Ca<sup>2+</sup>]<sub>i</sub>). Increased [Ca<sup>2+</sup>]<sub>i</sub> stimulates lipogenic gene expression and activity and inhibits **lipolysis**, resulting in increased adipocyte lipid accumulation. Since calcitriol stimulates adipocyte Ca<sup>2+</sup> influx, low calcium diets promote adiposity, while dietary calcium-suppression. . . confirmed in controlled rodent studies as well as by epidemiological and clinical trial data, all of which confirm protection from **obesity** with high calcium intakes. Moreover, dairy sources of calcium exert markedly greater effects which are most likely attributable to additional bioactive **compounds** in dairy which act synergistically with calcium to attenuate adiposity.

CT . . . physiology

\*Calcium, Dietary: AD, administration & dosage

\*Dairy Products

Diet, Reducing

Energy Metabolism: PH, physiology

Humans

Milk Proteins: ME, metabolism

**Obesity: DH, diet therapy**

\***Obesity: ME, metabolism**

\***Obesity: PC, prevention & control**

Research Support, Non-U.S. Gov't

Risk Factors

L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

TI Methods for the treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12

PY 2003

IN An, Wenqian Frank; Chen, Hong

TI Methods for the treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12

AB The invention relates to methods and compns. for the diagnosis and treatment of metabolic disorders, including, but not limited to, **obesity**, overweight, diabetes, insulin resistance, anorexia, and cachexia. The invention further provides methods for identifying a **compd.** capable of treating a metabolic disorder. The invention also provides methods for identifying a **compd.** capable of modulating a metabolic activity. Yet further, the invention provides a method for modulating a metabolic activity. In addition, . . . nucleic acid expression. In another aspect, the invention provides methods for modulating lipogenesis in a subject and methods for modulating **lipolysis** in a subject.

ST metabolic disorder antiobesity antidiabetes matrix metalloproteinase **modulation**

IT Computer program

(ALIGN; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Ribozymes

RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(MMP-12; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Adipose tissue

(adipocyte, progenitor; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix

metalloproteinase 12)

IT Antibodies and Immunoglobulins  
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (against MMP-12; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Metabolism, animal  
 (disorder, treatment of; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Animal tissue  
 (expressing MMP-12; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Lipids, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (homeostasis; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Homeostasis  
 (lipid, glucose, insulin; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Antidiabetic agents  
 Antiobesity agents  
 Drug screening  
 Human  
 Mus  
 Protein sequences  
 cDNA sequences  
 (methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Cell differentiation  
 Hyperplasia  
 (modulation of; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Body weight  
 Diabetes mellitus  
 (overweight; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT Anorexia  
 Cachexia  
**Obesity**  
 (treatment of; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT 81669-70-7, Metalloprotease  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (activity; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT 582341-15-9P, Elastase (human) 582341-27-3P, Elastase (mouse)  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (amino acid sequence; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT 9004-06-2P, Matrix metalloproteinase 12  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (antisense mol.; methods for treatment of metabolic disorders,

including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT 582341-16-0, DNA (human elastase cDNA plus flanks) 582341-26-2, DNA (mouse elastase cDNA plus flanks)  
 RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (nucleotide sequence; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT 9004-10-8, Insulin, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (resistance; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT 50-99-7, D-Glucose, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (tolerance, homeostasis; methods for treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

IT 582345-67-3 582345-68-4  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; methods for the treatment of metabolic disorders, including **obesity** and diabetes, by modulating matrix metalloproteinase 12)

L7 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

TI Methods for the treatment of metabolic disorders, including **obesity** and diabetes

PY 2003

IN Xu, Haiyan

TI Methods for the treatment of metabolic disorders, including **obesity** and diabetes

AB The invention relates to methods and compns. for the diagnosis and treatment of metabolic disorders, including, but not limited to, **obesity**, diabetes, overweight, insulin resistance, anorexia, and cachexia. The invention further provides methods for identifying a **compd.** capable of treating a metabolic disorder. The invention also provides methods for identifying a **compd.** capable of modulating a metabolic activity. Yet further, the invention provides a method for modulating a metabolic activity. In addition, . . . nucleic acid expression. In another aspect, the invention provides methods for modulating lipogenesis in a subject and methods for modulating **lipolysis** in a subject.

IT Proteins  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (SARP3 (secreted apoptosis related protein 3); methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Antisense nucleic acids  
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (SARP3 mol.; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Gene, animal  
 RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (SARP3; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Ribozymes  
 RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (SARP3; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Adipose tissue  
 (adipocyte, progenitor, growth of; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Antibodies and Immunoglobulins  
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (anti-SARP3; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Peptides, biological studies  
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (antisense, to SARP3; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Drugs  
 (appetite stimulants; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Metabolism, animal  
 (disorder; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Lipids, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (metabolism, **modulation** of; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Antidiabetic agents  
 Antiobesity agents  
 Appetite depressants  
 Drug screening  
 Feeding  
 Human  
 Mus  
 Protein sequences  
 cDNA sequences  
 (methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Apoptosis  
 Hyperplasia  
 Hypertrophy  
 (**modulation** of; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Promoter (genetic element)  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (of SARP3 gene; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Cell differentiation  
 (of adipose cell progenitor; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Body weight  
 (overweight; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Appetite  
 (stimulants; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Anorexia  
 Cachexia  
 Diabetes mellitus  
**Obesity**  
 (treatment of; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Catenins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 ( $\beta$ -; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT 568619-83-OP 568623-79-OP  
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (amino acid sequence; methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT 169494-85-3, Leptin

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (methods for treatment of metabolic disorders, including  
**obesity** and diabetes)

IT 568619-84-1 568623-80-3  
 RL: BSU (Biological study, unclassified); PRP (Properties); THU  
 (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (nucleotide sequence; methods for treatment of metabolic disorders,  
 including **obesity** and diabetes)

IT 9004-10-8, Insulin, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (resistance; methods for treatment of metabolic disorders, including  
**obesity** and diabetes)

IT 50-99-7, D-Glucose, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (tolerance; methods for treatment of metabolic disorders, including  
**obesity** and diabetes)

IT 568631-45-8 568631-46-9  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; methods for the treatment of metabolic  
 disorders, including **obesity** and diabetes)

L7 ANSWER 4 OF 10 MEDLINE on STN DUPLICATE 1

TI Mechanisms of dairy **modulation** of adiposity.

PY 2003

AU Zemel Michael B

TI Mechanisms of dairy **modulation** of adiposity.

AB . . . diets to attenuate adipocyte lipid accretion and weight gain  
 during periods of overconsumption of an energy-dense diet and to increase  
**lipolysis** and preserve thermogenesis during caloric restriction,  
 thereby markedly accelerating weight loss. Our studies of the agouti gene  
 in **obesity** and insulin resistance demonstrate a key role for  
 intracellular Ca(2+) in regulating adipocyte lipid metabolism and  
 triglyceride storage, with increased intracellular Ca(2+), resulting in  
 stimulation of lipogenic gene expression and lipogenesis, and suppression  
 of **lipolysis**, resulting in adipocyte lipid filling and increased  
 adiposity. Moreover, we have recently demonstrated that the increased  
 calcitriol produced in response. . . promotes adiposity. Accordingly,  
 suppressing calcitriol levels by increasing dietary calcium is an  
 attractive target for the prevention and management of **obesity**.  
 In support of this concept, transgenic mice expressing the agouti gene  
 specifically in adipocytes (a humanlike pattern) respond to low calcium  
 diets with accelerated weight gain and fat accretion, whereas high calcium  
 diets markedly inhibit lipogenesis, accelerate **lipolysis**,  
 increase thermogenesis and suppress fat accretion and weight gain in  
 animals maintained at identical caloric intakes. Further, low calcium  
 diets. . . fat gain and accelerating fat loss. This augmented effect  
 of dairy vs. supplemental calcium is likely attributable to additional  
 bioactive **compounds** in dairy that act synergistically with  
 calcium to attenuate adiposity; among these are angiotensin converting  
 enzyme inhibitory peptides, which limit. . .

CT . . . metabolism

Animals

\*Calcium, Dietary: TU, therapeutic use

\*Dairy Products

Guinea Pigs

Humans

\*Interacellular Signaling Peptides and Proteins

Mice

Mice, Transgenic

\***Obesity: DH, diet therapy**

\*Proteins: DE, drug effects

L7 ANSWER 5 OF 10 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Role of dietary calcium and dairy products in modulating adiposity.

PY 2003

AU Zemel, Michael B. [Reprint Author]

AB. . . of energy metabolism. High-calcium diets attenuate adipocyte lipid  
 accretion and weight gain during overconsumption of an energy-dense diet



and increase **lipolysis** and preserve thermogenesis during caloric restriction, thereby markedly accelerating weight loss. Our studies of the agouti gene demonstrate a key. . . lipid metabolism and TG storage. Increased intracellular Ca<sup>2+</sup> resulting in stimulation of lipogenic gene expression, and lipogenesis and suppression of **lipolysis** resulting in adipocyte lipid filling and increased adiposity. Moreover, we recently demonstrated that the increased calcitriol produced in response to. . . adipocyte Ca<sup>2+</sup> influx and, consequently, promotes adiposity. Accordingly, suppressing calcitriol levels by increasing dietary calcium is an attractive target for **obesity** intervention. In support of this concept, transgenic mice expressing the agouti gene specifically in adipocytes (a human-like pattern) respond to low-calcium diets with accelerated weight gain and fat accretion, whereas high-calcium diets markedly inhibit lipogenesis, accelerate **lipolysis**, increase thermogenesis, and suppress fat accretion and weight gain in animals maintained at identical caloric intakes. Further, low-calcium diets impede. . . weight and fat gain and accelerating fat loss. This augmented effect of dairy products is likely due to additional bioactive **compounds** in dairy that act synergistically with calcium to attenuate adiposity. These concepts are confirmed by both epidemiological and clinical data,. . . exert significantly greater effects. These data indicate an important role for dairy products in both the prevention and treatment of **obesity**.

IT Major Concepts

Nutrition

IT Diseases

**obesity**: nutritional disease

**Obesity** (MeSH)

IT Chemicals & Biochemicals

1,25-dihydroxy-vitamin D; calcium: intracellular concentration

IT Miscellaneous Descriptors

adiposity: **modulation**; dairy products: dairy product; dietary calcium: food supplement; energy metabolism: regulation; energy partitioning; high-calcium diet; lipid metabolism

L7 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

TI sequences of protein 14273 from human and mouse, and methods for the treatment of metabolic disorders, including **obesity** and diabetes

PY 2002

2003

2002

IN Gimeno, Ruth; Tsai, Fong-Ying

TI sequences of protein 14273 from human and mouse, and methods for the treatment of metabolic disorders, including **obesity** and diabetes

AB . . . 14273 gene expression has been further found to be upregulated during exposure to cold, and down-regulated in genetic model of **obesity**. The present invention relates to methods and compns. for the diagnosis and treatment of metabolic disorders, including, but not limited to, **obesity**, diabetes, overweight, anorexia, or cachexia. The invention further provides methods for identifying a **compd.** capable of treating a metabolic disorder. The invention also provides methods for identifying a **compd.** capable of modulating a metabolic activity. Yet further, the invention provides a method for modulating a metabolic activity. In addition,. . . nucleic acid expression. In another aspect, the invention provides methods for modulating lipogenesis in a subject and methods for modulating **lipolysis** in a subject. In yet another aspect, the invention provides methods for regulating endogenous glucose levels.

ST sequence protein human mouse metabolic disorder **obesity** diabetes therapy

IT Proteins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Adipose tissue

(adipocyte, hyperplastic or hypertrophic growth, treatment of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Gel electrophoresis

(agarose, for detecting 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Antisense DNA

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Adipose tissue

(brown, high level of 14273 gene expression in; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Metabolism, animal

(disorder, treatment of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT mRNA

RL: BSU (Biological study, unclassified); BIOL (Biological study) (encoding protein 14273, tissue distribution; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Northern blot hybridization

Nucleic acid amplification (method)

Southern blot hybridization

(for detecting 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Nucleic acid hybridization

(for detecting the presence of protein 14273 in a sample; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Genetic vectors

(for expressing protein 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Gene therapy

(for modulating the levels or activities of protein 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Nucleic acid hybridization

(in situ, for detecting 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Antibodies and Immunoglobulins

RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(labeled, to protein 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Primers (nucleic acid)

Probes (nucleic acid)

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(labeled; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(**lipolysis**, **modulation** of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Second messenger system

(**modulation** of; sequences of protein 14273 from human and

mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT. Diagnosis  
(mol.; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

•

IT Mutagenesis  
(on 14273 gene; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Lipids, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(production, **modulation** of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Antidiabetic agents  
Antiobesity agents  
Drug screening  
Human  
Molecular cloning  
Protein sequences  
cDNA sequences  
(sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Antibodies and Immunoglobulins  
RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(to protein 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Mus  
(transgenic; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Diabetes mellitus  
**Obesity**  
(treatment of; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT Adipose tissue  
(white, high level of 14273 gene expression in; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT 456538-24-2P, Protein (human clone 14273) 456538-26-4P, Protein (mouse clone 14273)  
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(amino acid sequence; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT 9012-36-6, Agarose  
RL: DEV (Device component use); USES (Uses)  
(gel electrophoresis, for detecting 14273; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT 456538-23-1 456538-25-3  
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(nucleotide sequence; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

IT 456540-70-8, 3: PN: WO02067868 SEQID: 3 unclaimed DNA 456540-71-9, 6: PN: WO02067868 SEQID: 6 unclaimed DNA 456540-72-0 456540-73-1  
456540-74-2 456540-75-3 456540-76-4 456540-77-5 456540-78-6  
456540-79-7 456540-80-0 456540-81-1  
RL: PRP (Properties)

(unclaimed nucleotide sequence; sequences of protein 14273 from human and mouse, and methods for treatment of metabolic disorders, including **obesity** and diabetes)

L7 ANSWER 7 OF 10 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI **Modulation** of the sulfonylurea receptor and calcium in  
adipocytes for treatment of **obesity**/diabetes.  
PY 2002  
AU Wilkison, William O. [Inventor, Reprint Author]; Zemel, Michael B.  
[Inventor]; Moustaid-Moussa, Naima [Inventor]  
TI **Modulation** of the sulfonylurea receptor and calcium in  
adipocytes for treatment of **obesity**/diabetes.  
AB The invention provides methods for determining the ability of  
**compounds** to regulate lipogenesis and **lipolysis** by  
acting as a sulfonylurea-1 (SUR 1) potassium channel activator, an  
adipocyte potassium channel activator, an SUR 1 antagonist, and.  
SUR 1 antagonist. The present invention recognizes the presence of the  
sulfonylurea receptor in adipocytes and its utility in identifying  
**compounds** and in regulating lipogenesis and **lipolysis**.  
IT . . .  
(Human Medicine, Medical Sciences); Methods and Techniques; Nutrition  
IT Diseases  
diabetes: endocrine disease/pancreas, metabolic disease, therapy  
Diabetes Mellitus (MeSH)  
IT Diseases  
**obesity**: nutritional disease, therapy  
**Obesity** (MeSH)  
IT Methods & Equipment  
adipocyte sulfonylurea receptor/calcium **modulation**  
**obesity**/diabetes therapy: clinical techniques, therapeutic and  
prophylactic techniques

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2  
TI **Modulation** of the sulfonylurea receptor and calcium in  
adipocytes for treatment of **obesity**/diabetes, and screening  
method  
PY 2000  
2001  
2002  
2003  
IN Wilkison, William O.; Zemel, Michael B.; Moustaid-Mousse, Naima  
TI **Modulation** of the sulfonylurea receptor and calcium in  
adipocytes for treatment of **obesity**/diabetes, and screening  
method  
AB Methods are provided for identifying **compds.** and compns. useful  
in the regulation of weight, the treatment of **obesity**, diabetes and  
other insulin resistance-related disorders hypertension, cardiovascular  
disease, etc. The methods comprise the use of adipocytes and  
preadipocytes in assays and screens for **compds.** or compns. of  
interest. The invention recognizes the presence of the sulfonylurea  
receptor in adipocytes and its utility in identifying **compds.**  
and in treating **obesity** and other insulin resistance-related  
disorders. The methods of the invention also provide for identifying  
novel calcium channels or other calcium regulatory channels that are  
selectively expressed in human adipocytes as compared to human  
preadipocytes and for screening adipocytes for **compds.** that  
selectively antagonize calcium. These **compds.** may be used in  
the treatment of **obesity** and diabetes and other insulin  
resistance-related disorders. Once identified, the **compds.** of  
the invention can be used in pharmaceutical compns. for the treatment of  
insulin resistance-related disorders and to regulate lipogenesis and  
**lipolysis**.  
ST sulfonyl receptor **modulation** adipocyte **obesity**  
diabetes drug screening; calcium channel adipocyte **obesity**  
diabetes drug screening; insulin resistance disorder drug screening;  
hypertension cardiovascular disease drug screening; lipogenesis  
**lipolysis** drug screening  
IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (SUR1; sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT Adipose tissue  
 (adipocyte; sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT Ion channel blockers  
 (calcium; sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT Biological transport  
 (influx; sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT Lipids, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)  
 (lipogenesis; sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT Lipids, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (**lipolysis**; sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT Antidiabetic agents  
 Antiobesity agents  
 Drug screening  
 (sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT Calcium channel  
 Glycerides, biological studies  
 Potassium channel  
 Sulfonylurea receptors  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT 9004-10-8, Insulin, biological studies 9045-77-6, Fatty acid synthase 9075-65-4, Glycerol-3-phosphate dehydrogenase  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT 364-98-7, Diazoxide 11024-24-1, Digitonin  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT 10238-21-8, Glibenclamide 21829-25-4, Nifedipine  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

IT 50-99-7, D-Glucose, biological studies 56-81-5, 1,2,3-Propanetriol, biological studies 60-92-4 7440-70-2, Calcium, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (sulfonylurea receptor and calcium **modulation** in adipocytes for treatment of **obesity**/diabetes, and screening method)

L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

TI Mammalian **lipolysis**-stimulated receptors LSR and nucleic acids  
and uses for diagnosing, preventing and/or treating **obesity** and  
related risks or complications

PY 1999  
1999  
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2002  
2004

IN Bihain, Bernard; Bougueleret, Lydie; Yen-Potin, Frances

TI Mammalian **lipolysis**-stimulated receptors LSR and nucleic acids  
and uses for diagnosing, preventing and/or treating **obesity** and  
related risks or complications

AB . . . and human LSR proteins, the genes and cDNAs encoding them, and  
their cloning and expression. Methods for diagnosing and selecting  
**compds.** useful as medicine for preventing and/or treating  
pathologies and/or pathogenic conditions such as **obesity** and  
anorexia, hyperlipemia, atherosclerosis, diabetes, hypertension, and more  
generally the various pathologies associated with anomalies of the cytokine  
metabolism are. . .

ST sequence rat mouse human **lipolysis** stimulated receptor cDNA;  
leptin VLDL LDL internalization degrdn **lipolysis** stimulated  
receptor; Clq receptor binding regulation **lipolysis** stimulated  
receptor

IT Apolipoproteins  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(B, binding/internalization by LSR of; mammalian **lipolysis**  
-stimulated receptors LSR and nucleic acids and uses for diagnosing,  
preventing and/or treating **obesity** and related risks or  
complications)

IT Complement receptors  
RL: BAC (Biological activity or effector, except adverse); BPR (Biological  
process); BSU (Biological study, unclassified); BIOL (Biological study);  
PROC (Process)  
(Clq, binding to/regulation of LSR by; mammalian **lipolysis**  
-stimulated receptors LSR and nucleic acids and uses for diagnosing,  
preventing and/or treating **obesity** and related risks or  
complications)

IT Apolipoproteins  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(E, binding/internalization by LSR of; mammalian **lipolysis**  
-stimulated receptors LSR and nucleic acids and uses for diagnosing,  
preventing and/or treating **obesity** and related risks or  
complications)

IT Lipoprotein receptors  
RL: ANT (Analyte); BPR (Biological process); BSU (Biological study,  
unclassified); PRP (Properties); PUR (Purification or recovery); THU  
(Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP  
(Preparation); PROC (Process); USES (Uses)  
(LSR (**lipolysis**-stimulated receptor); mammalian

**lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Liver

(LSR of; mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Antibodies

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (anti-LSR; mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Chylomicrons

(binding/internalization by LSR of; mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Glycerides, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (binding/internalization by LSR of; mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Heart, disease

(failure; mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Primers (nucleic acid)

Probes (nucleic acid)

RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (for LSR nucleic acid; mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT cDNA sequences

(for **lipolysis**-stimulated receptors LSR of rat, mouse and human)

IT Lipids, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (hyperlipidemia; mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Lipoproteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (low-d., binding/internalization by LSR of; mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Anorexia

Antiartherosclerotics

Antidiabetic agents

Antihypertensives

Antiobesity agents

Diagnosis

Digestion, biological

Drug screening

Mouse (*Mus musculus*)

Rat (*Rattus norvegicus*)

(mammalian **lipolysis**-stimulated receptors LSR and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Gene, animal

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (mammalian **lipolysis**-stimulated receptors LSR and nucleic

acids and uses for diagnosing, preventing and/or treating  
**obesity** and related risks or complications)

IT Antibodies

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(monoclonal, anti-LSR; mammalian **lipolysis**-stimulated  
receptors LSR and nucleic acids and uses for diagnosing, preventing  
and/or treating **obesity** and related risks or complications)

IT Genetic polymorphism

Mutation

(of LSR gene, detection of; mammalian **lipolysis**-stimulated  
receptors LSR and nucleic acids and uses for diagnosing, preventing  
and/or treating **obesity** and related risks or complications)

IT Molecular cloning

(of LSR nucleic acid; mammalian **lipolysis**-stimulated  
receptors LSR and nucleic acids and uses for diagnosing, preventing  
and/or treating **obesity** and related risks or complications)

IT DNA sequences

(of **lipolysis**-stimulated receptor LSR genes of human)

IT Protein sequences

(of **lipolysis**-stimulated receptors LSR of rat, mouse and  
human)

IT Mammal (Mammalia)

Rabbit

(transgenic, LSR-expressing; mammalian **lipolysis**-stimulated  
receptors LSR and nucleic acids and uses for diagnosing, preventing  
and/or treating **obesity** and related risks or complications)

IT Lipoproteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)

(very-low-d., binding/internalization by LSR of; mammalian  
**lipolysis**-stimulated receptors LSR and nucleic acids and uses  
for diagnosing, preventing and/or treating **obesity** and  
related risks or complications)

IT 220702-90-9P 220702-94-3P 220702-96-5P 220702-98-7P 220703-00-4P  
220703-02-6P 220703-06-0P 220703-07-1P 220703-08-2P

RL: ANT (Analyte); BPR (Biological process); BSU (Biological study,  
unclassified); PRP (Properties); PUR (Purification or recovery); THU  
(Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP  
(Preparation); PROC (Process); USES (Uses)

(amino acid sequence; mammalian **lipolysis**-stimulated  
receptors LSR and nucleic acids and uses for diagnosing, preventing  
and/or treating **obesity** and related risks or complications)

IT 169494-85-3, Leptin

RL: BAC (Biological activity or effector, except adverse); BPR (Biological  
process); BSU (Biological study, unclassified); BIOL (Biological study);  
PROC (Process)

(binding to and **modulation** of LSR by; mammalian  
**lipolysis**-stimulated receptors LSR and nucleic acids and uses  
for diagnosing, preventing and/or treating **obesity** and  
related risks or complications)

IT 69-93-2, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(hyperuricemia; mammalian **lipolysis**-stimulated receptors LSR  
and nucleic acids and uses for diagnosing, preventing and/or treating  
**obesity** and related risks or complications)

IT 220702-87-4 220702-93-2 220702-95-4 220702-97-6 220702-99-8  
220703-01-5 220703-03-7 220703-04-8 220703-05-9 220703-09-3  
220703-10-6 220703-11-7 220703-12-8 220703-13-9 220703-14-0  
220703-15-1 220703-16-2 220703-17-3 220703-18-4

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP  
(Properties); THU (Therapeutic use); ANST (Analytical study); BIOL  
(Biological study); USES (Uses)

(nucleotide sequence; mammalian **lipolysis**-stimulated  
receptors LSR and nucleic acids and uses for diagnosing, preventing  
and/or treating **obesity** and related risks or complications)

IT 220608-53-7 220608-57-1

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)



(rat LSR subunit  $\alpha$  peptide; mammalian **lipolysis**  
-stimulated receptors LSR and nucleic acids and uses for diagnosing,  
preventing and/or treating **obesity** and related risks or  
complications)

17 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

TI Evidence for abnormal prostaglandin synthesis in obese Zucker rat adipose  
cell cultures

PY 1989

AU Gaskins, H. Rex; Hausman, Dorothy B.; Martin, Roy J.; Hausman, Gary J.

AB PGE2 synthesis by presumptive and mature adipocytes isolated from lean and  
obese Zucker rats was examined Isoproterenol-stimulated **lipolysis**  
was greater in short-term incubations of mature adipocytes isolated from  
lean rats than in those from obese rats in terms. . . not altered,  
regardless of treatment. Primary cell cultures of presumptive adipocytes  
from both phenotypes released PGE2 in response to lipolytic **compds**  
.; however, cultures from obese rats had lower PGE2 release rates than  
cultures from lean rats. In addition, compared to cultures. . .

ST prostaglandin formation adipose cell **obesity**; PGE2 formation  
adipocyte **obesity**

IT Cell aging

(PGE2 formation by adipocytes in culture inhibition by **obesity**  
in relation to)

IT **Obesity**

(PGE2 formation by adipocytes in, cell maturation **modulation**  
of)

IT Prostaglandins

RL: FORM (Formation, nonpreparative)

(formation of, by adipocytes in culture, **obesity** effect on,  
cell maturation in relation to)

IT Lipids, biological studies

RL: BIOL (Biological study)

(lysis of, by adipocytes in culture, isoproterenol stimulation of,  
**obesity** inhibition of)

IT Adipose tissue, metabolism

(adipocyte, PGE2 formation by, in culture, **obesity** effect on,  
cell maturation in relation to)

IT 7683-59-2, Isoproterenol

RL: BIOL (Biological study)

(PGE2 formation by adipocytes in culture stimulation by,  
**obesity** inhibition of)

IT 363-24-6, PGE2

RL: FORM (Formation, nonpreparative)

(formation of, by adipocytes in culture, **obesity** effect on,  
cell maturation in relation to)

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(FILE 'HOME' ENTERED AT 10:43:10 ON 01 JUN 2005)

FILE 'CAPLUS, MEDLINE, BIOSIS' ENTERED AT 10:43:36 ON 01 JUN 2005

L1 1. S LSR AND COMPOUND AND MODULATION AND OBESITY  
L2 9 S LSR AND OBESITY

L2 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:931403 CAPLUS

DN 140:758

TI Inhibiting the proteolytic inactivation of OBG3 protein by peptides  
derived from the unique region of the protein in treatment of metabolic  
disorders

IN Lucas, John; Dialynas, Deno

PA Genset SA, Fr.

SO PCT Int. Appl., 160 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003097689	A1	20031127	WO 2003-IB1888	20030507
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	EP 1506229	A1	20050216	EP 2003-719041	20030507
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
PRAI	US 2002-381603P	P	20020517		
	WO 2003-IB1888	W	20030507		

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 12 1-9 ti py au so kwic

L2 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

TI Inhibiting the proteolytic inactivation of OBG3 protein by peptides  
derived from the unique region of the protein in treatment of metabolic  
disorders

PY 2003

2005

IN Lucas, John; Dialynas, Deno

SO PCT Int. Appl., 160 pp.

CODEN: PIXXD2

AB . . . prolong the effectiveness of the protein. These fragments of  
OBG3 should be effective for reducing body mass and for treating  
**obesity**-related diseases and disorders. These **obesity**  
-related diseases and disorders include hyperlipidemias, atherosclerosis,  
diabetes, and hypertension.

ST OBG3 **obesity** treatment proteolysis inactivation inhibition  
cysteine peptide; sequence cDNA OBG3 protein human mouse

IT Lipoprotein receptors

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

(LSR (lipolysis-stimulated receptor), stimulation by OBG3 of;  
inhibiting proteolytic inactivation of OBG3 protein by peptides derived  
from unique region of protein in treatment of metabolic disorders)

IT **Obesity**

(treatment of; inhibiting proteolytic inactivation of OBG3 protein by  
peptides derived from unique region of protein in treatment of  
metabolic disorders)

L2 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

TI Human biallelic marker maps and their uses

PY 2002

2003  
2002  
2003  
2004  
2004

IN Cohen, Daniel; Blumenfeld, Marta; Chumakov, Ilya; Abderrahim, Hadi;  
Bihain, Bernard

SO PCT Int. Appl., 311 pp.  
CODEN: PIXXD2

AB . . . of heterozygosity) data as a candidate region. Methods of the  
invention were also used to show association of a frequent **LSR**  
(lipolysis-stimulated receptor) gene polymorphism with elevated plasma  
triglycerides in obese adolescents.

IT Lipoprotein receptors  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**LSR** (lipolysis-stimulated receptor), gene for; human  
biallelic marker maps and their uses)

IT Gene, animal  
RL: ADV (Adverse effect, including toxicity); ANT (Analyte); BSU  
(Biological study, unclassified); ANST (Analytical study); BIOL  
(Biological study)  
(for **LSR** (lipolysis stimulated receptor); human biallelic  
marker maps and their uses)

IT Allele frequency  
Alleles  
Alzheimer's disease  
Computer application  
DNA microarray technology  
DNA sequence analysis  
Data processing  
Genetic linkage  
Genetic markers  
Genotyping (method)  
Human  
Mutation  
Nucleic acid hybridization  
**Obesity**  
PCR (polymerase chain reaction)  
Population genetics  
Prostate gland, neoplasm  
Simulation and Modeling, biological  
Susceptibility (genetic)  
(human biallelic marker maps and their uses)

L2 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

TI Methods of screening for compounds that modulate the **LSR**  
(lipolysis stimulated receptor)-leptin interaction and their use in the  
prevention and treatment of **obesity**-related diseases

PY 2001  
2002  
2001  
2002

IN Yen, Frances; Erickson, Mary Ruth; Fruebis, Joachim; Bihain, Bernard

SO PCT Int. Appl., 247 pp.  
CODEN: PIXXD2

TI Methods of screening for compounds that modulate the **LSR**  
(lipolysis stimulated receptor)-leptin interaction and their use in the  
prevention and treatment of **obesity**-related diseases

AB The present invention is drawn to methods of screening for new compds. for  
the treatment of **obesity** and **obesity**-related diseases  
and disorders, as well as methods of treating **obesity**-related  
diseases and disorders, based on the discovery of the role of the leptin-  
**LSR** interaction in **obesity**. The lipolysis stimulated  
receptor (**LSR**) displays a high affinity for unmodified  
triglyceride-rich lipoproteins and is involved in the partitioning of  
dietary lipids among the liver, adipose. . . leptin OB receptor, thereby  
showing that leptin signaling can be independent of the OB receptor.  
Leptin increases the activity of **LSR**, binds directly to

LSR, and that leptin binding leads to leptin degradation LSR is actually at least two receptors, one for triglyceride-rich lipoproteins, and one for leptin. The three subunits that make up LSR,  $\alpha$ ,  $\beta$ , and  $\alpha'$ , actually combine in at least two ways: (1)  $\alpha$  and  $\beta$  together make up the LSR receptor for triglyceride-rich lipoproteins, and (2)  $\alpha'$  is a necessary part of the LSR receptor for leptin, that may include  $\beta$  as well. Thus, it is now clear that assays can be designed for identifying modulators or receptors/binding partners/signalling cascade members that are specific for the triglyceride-related activity of LSR or for the leptin-related activity of LSR or both. Further, the invention features the discovery of a 22 amino acid region of human leptin that modulates LSR activity in vitro and in vivo in the same way as the intact human leptin, thus allowing the use of only this critical region in assays for modulators of the leptin-LSR interaction, and new leptin receptors and binding partners. The new leptin fragment can also be used in disease treatment since. . .

ST sequence rat mouse human lipolysis stimulated receptor cDNA; leptin interaction lipolysis stimulated receptor LSR drug screening

IT Complement receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (Clq; methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Animal cell line  
 (CHO-K1, host; methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Cytometry  
 (FACS (fluorescence-activated cell sorting); methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Animal cell line  
 (HepG2, host; methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Animal cell line  
 (Hepa 1, -6, host; methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Mucopolysaccharidosis  
 (Hurler's syndrome, treatment of; methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Lipoprotein receptors  
 RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (LSR (lipolysis-stimulated receptor); methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Animal cell line  
 (PLC, host; methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Transcription factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (activator, for VP16; methods of screening for compds. that modulate LSR (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Molecular association  
 (between **LSR** and leptin; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Glycerides, biological studies  
 Lipoproteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (binding, uptake or degradation; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Drugs  
 (comprising leptins; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Artery, disease  
 (coronary, treatment of; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Bond  
 (covalent, interactions between **LSR** and leptin; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Primers (nucleic acid)  
 Probes (nucleic acid)  
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (for **LSR** nucleic acid; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Computer application  
 Crystallography  
 NMR (nuclear magnetic resonance)  
 X-ray  
 (for detecting interactions between **LSR** and leptin; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Genetic vectors  
 (for expressing leptin; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Adipose tissue  
 Brain  
 Liver  
 Muscle  
 (gene library from; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT CD2 (antigen)  
 CD4 (antigen)  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (gene library labeled with; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Proteins, specific or class  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (green fluorescent, gene library labeled with; methods of screening for

compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Bond

(hydrophobic, interactions between **LSR** and leptin; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (hyperlipidemia, treatment of; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Hydrogen bond

Steric hindrance

(interactions between **LSR** and leptin; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Gene

RL: BSU (Biological study, unclassified); BIOL (Biological study) (library, retroviral, screening; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Drug delivery systems

(liposomes; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Adeno-associated virus

Antiartherosclerotics

Antidiabetic agents

Antihypertensives

Antiobesity agents

Cattle

Chicken (*Gallus domesticus*)

Chimpanzee (*Pan troglodytes*)

DNA sequences

Diagnosis

Dog (*Canis familiaris*)

Drug screening

Gene therapy

Macaca mulatta

Mammal (Mammalia)

Mouse

Mouse (*Mus musculus*)

Orangutan

Protein sequences

Rat (*Rattus norvegicus*)

Sheep

Swine

cDNA sequences

(methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Gene, animal

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Chimeric gene

Cytokines

Fatty acids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (methods of screening for compds. that modulate **LSR**

(lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Genetic polymorphism

Mutation

(of **LSR** gene, detection of; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Molecular cloning

(of **LSR** nucleic acid; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Transcription factors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (repressors, for KRAB; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Peptide library

cDNA library

(screening; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Peptides, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (screening; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Mutagenesis

(site-directed, substitution, on **LSR** stop codon; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Brain, disease

(stroke, treatment of; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Disease, animal

(syndrome X, treatment of; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Codons

RL: BSU (Biological study, unclassified); BIOL (Biological study) (termination, mutation on; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Antibodies

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (to **LSR**; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Anorexia

Cachexia

Heart, disease

(treatment of; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT Bond

(van der Waals, interactions between **LSR** and leptin; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)



IT Protein motifs  
(zinc finger; methods of screening for compds. that modulate  
**LSR** (lipolysis stimulated receptor)-leptin interaction and  
their use in prevention and treatment of **obesity**-related  
diseases)

IT 331467-54-0 331467-56-2 331467-58-4 331467-60-8 331467-62-0  
331467-64-2 331467-66-4 331467-68-6 331467-70-0 331467-71-1  
331467-72-2 331467-73-3 331467-74-4 331467-75-5 331467-76-6  
331467-77-7 331467-78-8 331467-79-9 331467-80-2 331467-81-3  
331467-82-4 331467-83-5 331467-84-6 331467-85-7 331467-86-8  
331467-87-9 331467-88-0 331467-89-1 331467-90-4 331467-91-5  
331467-92-6 331467-93-7 331467-94-8 331467-95-9 331481-55-1  
331481-56-2 331481-57-3 331481-58-4 331481-59-5 331481-60-8  
331481-61-9 331481-62-0 331481-63-1 331481-64-2 331481-65-3  
331481-66-4 331481-67-5 331481-68-6 331481-69-7

RL: PRP (Properties)  
(Unclaimed; methods of screening for compds. that modulate the  
**LSR** (lipolysis stimulated receptor)-leptin interaction and  
their use in the prevention and treatment of **obesity**-related  
diseases)

IT 160026-75-5P 170213-86-2P, Protein (rat clone 2A gene ob precursor)  
177404-21-6P, Leptin (human) 183147-64-0P 184973-66-8P, Leptin  
(cattle) 184973-68-0P, Leptin (Swine) 188833-76-3P 196217-63-7P,  
Leptin (Canis familiaris) 207465-86-9P, Leptin (chicken) 331476-95-0P,  
Leptin (Gorilla gorilla) 331476-96-1P, Leptin (sheep) 331476-97-2P,  
Leptin (Orangutan)

RL: BAC (Biological activity or effector, except adverse); BPN  
(Biosynthetic preparation); BPR (Biological process); BSU (Biological  
study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(amino acid sequence; methods of screening for compds. that modulate  
**LSR** (lipolysis stimulated receptor)-leptin interaction and  
their use in prevention and treatment of **obesity**-related  
diseases)

IT 220702-90-9 220702-94-3 220702-96-5 220702-98-7 220703-00-4  
220703-02-6 220703-06-0 220703-07-1 220703-08-2

RL: BSU (Biological study, unclassified); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(amino acid sequence; methods of screening for compds. that modulate  
**LSR** (lipolysis stimulated receptor)-leptin interaction and  
their use in prevention and treatment of **obesity**-related  
diseases)

IT 169494-85-3P, Leptin

RL: BAC (Biological activity or effector, except adverse); BPN  
(Biosynthetic preparation); BPR (Biological process); BSU (Biological  
study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(binding, uptake or degradation; methods of screening for compds. that  
modulate **LSR** (lipolysis stimulated receptor)-leptin  
interaction and their use in prevention and treatment of  
**obesity**-related diseases)

IT 69-93-2, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(hyperuricemia, treatment of; methods of screening for compds. that  
modulate **LSR** (lipolysis stimulated receptor)-leptin  
interaction and their use in prevention and treatment of  
**obesity**-related diseases)

IT 53572-29-5, Apml

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(methods of screening for compds. that modulate **LSR**  
(lipolysis stimulated receptor)-leptin interaction and their use in  
prevention and treatment of **obesity**-related diseases)

IT 220702-87-4 220702-93-2 220702-95-4 220703-03-7 220703-05-9  
331476-98-3D, subfragments are claimed 331476-99-4 331477-00-0  
331477-01-1 331477-02-2

RL: BSU (Biological study, unclassified); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); USES (Uses)  
(nucleotide sequence; methods of screening for compds. that modulate

**LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT 3604-87-3, Ecdysone 84371-65-3, Ru486

RL: BSU (Biological study, unclassified); BIOL (Biological study) (small mol. regulatory system; methods of screening for compds. that modulate **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in prevention and treatment of **obesity**-related diseases)

IT 150412-01-4 175249-12-4 331481-15-3 331481-16-4 331481-17-5  
331481-18-6 331481-19-7 331481-20-0 331481-21-1, 1: PN: W00121647  
SEQID: 74 unclaimed DNA 331481-22-2 331481-23-3 331481-24-4  
331481-25-5, 5: PN: W00121647 SEQID: 78 unclaimed DNA 331481-26-6  
331481-27-7 331481-28-8 331481-29-9 331481-30-2 331481-31-3  
331481-32-4 331481-33-5 331481-34-6 331481-35-7 331481-36-8  
331481-37-9 331481-38-0 331481-39-1 331481-40-4 331481-41-5  
331481-42-6 331481-43-7 331481-44-8 331481-45-9 331481-46-0  
331481-47-1 331481-48-2 331481-49-3 331481-50-6 331481-51-7  
331481-52-8 331481-53-9

RL: PRP (Properties)

(unclaimed nucleotide sequence; methods of screening for compds. that modulate the **LSR** (lipolysis stimulated receptor)-leptin interaction and their use in the prevention and treatment of **obesity**-related diseases)

L2 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

TI Polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor

PY 2000

2000

2000

2001

2003

2002

2003

IN Blumenfeld, Marta; Bougueleret, Lydie; Bihain, Bernard

SO PCT Int. Appl., 191 pp.

CODEN: PIXXD2

TI Polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor

AB The invention provides human **LSR** (lipolysis stimulated receptor) genomic sequences, polypeptides, antibodies, and polynucleotides including biallelic markers derived from the **LSR** locus. Primers hybridizing to regions flanking these biallelic markers are also provided. This invention also provides polynucleotides and methods suitable. . . a nucleic acid containing sample for one or more biallelic markers of the invention. Association studies have already linked a **LSR** biallelic marker with both fasting and postprandial plasma triglyceride levels in obese adolescent girls, and a different **LSR** allelic marker with insulin and glucose levels of obese adolescent girls. A combination of **LSR** biallelic markers is associated with **obesity** in adolescent girls. The invention provides methods to detect a statistical correlation between a biallelic marker allele and a phenotype. . .

ST lipolysis stimulated receptor **LSR** gene biallelic marker **obesity**; sequence lipolysis stimulated receptor **LSR** gene human

IT Lipoprotein receptors

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(**LSR** (lipolysis-stimulated receptor); polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Gene, animal

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(**LSR**; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Primers (nucleic acid)  
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (amplification and microsequencing; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Heart, disease  
 (angina pectoris, syndrome X, biallelic marker diagnostic correlation with **obesity**-related; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Nucleic acid amplification (method)  
 Nucleic acid hybridization  
 PCR (polymerase chain reaction)  
 (assay; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Glycerides, biological studies  
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
 (biallelic marker correlation with plasma levels; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Atherosclerosis  
 Eye, disease  
 Kidney, disease  
 (biallelic marker diagnostic correlation with **obesity**-related; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT **Obesity**  
 (biallelic markers correlation with; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Genetic markers  
 (biallelic; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Cardiovascular system  
 (disease, biallelic marker diagnostic correlation with **obesity**-related; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Antiobesity agents  
 (evaluation of; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Diagnosis  
 (genetic; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Lipids, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (hyperlipidemia, biallelic marker correlation with; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Blood vessel, disease  
 (microangiopathy, biallelic marker diagnostic correlation with **obesity**-related; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT DNA sequence analysis  
 (microsequencing assay; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Diabetes mellitus  
 (non-insulin-dependent, biallelic marker diagnostic correlation with **obesity**-related; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT DNA sequences  
 Drug screening  
 Genotyping (method)  
 Molecular cloning  
 Protein sequences  
 cDNA sequences  
 (polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Genetic polymorphism  
 (single nucleotide, biallelic marker; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT Disease, animal

(syndrome X, biallelic marker diagnostic correlation with  
**obesity**-related; polymorphic markers of the **LSR** gene  
encoding the lipolysis-stimulated receptor)

IT 220702-98-7 220703-00-4 220703-02-6  
RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study,  
unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical  
study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(amino acid sequence; polymorphic markers of the **LSR** gene  
encoding the lipolysis-stimulated receptor)

IT 288281-68-5 288281-69-6 288281-70-9 288281-71-0 288281-72-1  
288281-73-2 288281-74-3 288281-75-4 288281-76-5 288281-77-6  
288281-78-7 288281-79-8 288281-80-1 288281-81-2 288281-82-3  
288281-83-4 288281-84-5 288281-85-6 288281-86-7 288281-87-8  
288281-88-9 288281-89-0 288281-90-3 288281-91-4 288281-92-5  
288281-93-6 288281-94-7 288281-95-8 288281-96-9 288281-97-0  
288281-98-1 288281-99-2 288282-00-8 288282-01-9 288282-02-0  
288282-03-1 288282-04-2 288282-05-3 288282-06-4 288282-07-5  
288282-08-6 288282-09-7 288282-10-0 288282-11-1 288282-12-2  
288282-13-3 288282-14-4 288282-15-5 288282-16-6 288282-17-7  
288282-18-8 288282-19-9 288282-20-2 288282-21-3 288282-22-4  
288282-23-5 288282-24-6 288282-25-7 288282-26-8 288282-27-9  
288282-28-0 288282-29-1 288282-30-4 288282-31-5 288282-32-6  
288282-33-7 288282-34-8 288282-35-9 288282-36-0 288282-37-1  
288282-38-2 288282-39-3 288282-40-6 288282-41-7 288282-42-8  
288282-43-9 288282-44-0 288282-45-1 288282-46-2 288282-47-3  
288282-48-4 288282-49-5 288282-50-8 288282-51-9 288282-52-0  
288282-53-1 288282-54-2 288282-55-3 288282-56-4 288282-57-5  
288282-58-6 288282-59-7 288282-60-0 288282-61-1 288282-62-2  
288282-63-3 288282-64-4 288282-65-5 288282-66-6 288282-67-7  
288282-68-8 288282-69-9 288282-70-2 288282-71-3 288282-72-4

RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical  
study); BIOL (Biological study); USES (Uses)

(amplification primer; polymorphic markers of the **LSR** gene  
encoding the lipolysis-stimulated receptor)

IT 50-99-7, D-Glucose, biological studies 9004-10-8, Insulin, biological  
studies

RL: BOC (Biological occurrence); BSU (Biological study, unclassified);  
BIOL (Biological study); OCCU (Occurrence)

(biallelic marker correlation with plasma levels; polymorphic markers  
of the **LSR** gene encoding the lipolysis-stimulated receptor)

IT 288282-73-5 288282-74-6 288282-75-7 288282-76-8 288282-77-9  
288282-78-0 288282-79-1 288282-80-4 288282-81-5 288282-82-6  
288282-83-7 288282-84-8 288282-85-9 288282-86-0 288282-87-1  
288282-88-2 288282-89-3 288282-90-6 288282-91-7 288282-92-8  
288282-93-9 288282-94-0 288282-95-1 288282-96-2 288282-97-3  
288282-98-4 288282-99-5 288283-00-1 288283-01-2 288283-02-3  
288283-03-4 288283-04-5 288283-05-6 288283-06-7 288283-07-8  
288283-08-9 288283-09-0 288283-10-3 288283-11-4 288283-12-5  
288283-13-6 288283-14-7 288283-15-8 288283-16-9 288283-17-0  
288283-18-1 288283-19-2 288283-20-5 288283-21-6 288283-22-7  
288283-23-8 288283-24-9 288283-25-0 288283-26-1 288283-27-2  
288283-28-3 288283-29-4 288283-30-7 288283-31-8 288283-32-9  
288283-33-0

RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical  
study); BIOL (Biological study); USES (Uses)

(microsequencing primer; polymorphic markers of the **LSR** gene  
encoding the lipolysis-stimulated receptor)

IT 220702-97-6 220703-01-5 288281-52-7, DNA (human gene **LSR**  
plus flanks) 288281-53-8 288281-54-9 288281-55-0 288281-56-1  
288281-57-2 288281-61-8 288281-62-9 288281-63-0 288281-64-1  
288281-65-2 288281-66-3 288281-67-4

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study,  
unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical  
study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(nucleotide sequence; polymorphic markers of the **LSR** gene  
encoding the lipolysis-stimulated receptor)

IT 129037-08-7, DNA (human gene G35018) 149568-81-0  
RL: PRP (Properties)

(unclaimed nucleotide sequence; polymorphic markers of the **LSR** gene encoding the lipolysis-stimulated receptor)

L2 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

TI Mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications

PY 1999

1999

1999

2004

1999

2002

1999

1999

2002

1999

2003

2001

2003

2004

2004

2004

2004

2003

2004

2002

2004

IN Bihain, Bernard; Bougueleret, Lydie; Yen-Potin, Frances

SO PCT Int. Appl., 279 pp.

CODEN: PIXXD2

TI Mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications

AB The invention concerns rat, mouse and human **LSR** proteins, the genes and cDNAs encoding them, and their cloning and expression. Methods for diagnosing and selecting compds. useful as medicine for preventing and/or treating pathologies and/or pathogenic conditions such as **obesity** and anorexia, hyperlipemia, atherosclerosis, diabetes, hypertension, and more generally the various pathologies associated with anomalies of the cytokine metabolism are also disclosed. The cDNAs for rat, mouse and human  $\alpha$ ,  $\alpha'$  and  $\beta$  subunits of **LSR** were cloned and sequenced. The human gene for **LSR** was also cloned and sequenced. The  $\alpha'$  and  $\beta$  subunits are produced by alternative splicing. The  $\alpha'$  subunit lacks exon. . . the  $\beta$  subunit, exons 3 and 4. The receptor comprises one  $\alpha$  or  $\alpha'$  subunit and, optimally, 3  $\beta$  subunits. **LSR** binds to ApoB and ApoE. After binding to **LSR**, the ApoB and ApoE are internalized and degraded. The cytokine leptin binds to the  $\alpha/\alpha'$  subunit and is subsequently internalized and degraded. Leptin stimulates binding, internalization and degradation of VLDL and LDL by **LSR**. Complement protein Clq receptor (ClqR) also binds to the receptor. When Clq binds to ClqR, it dissocs. from and activates **LSR**.

IT Apolipoproteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(B, binding/internalization by **LSR** of; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Complement receptors

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(Clq, binding to/regulation of **LSR** by; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and

related risks or complications)

IT Apolipoproteins  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (E, binding/internalization by **LSR** of; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Lipoprotein receptors  
 RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
 (**LSR** (lipolysis-stimulated receptor); mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Liver  
 (**LSR** of; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Antibodies  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (anti-**LSR**; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Chylomicrons  
 (binding/internalization by **LSR** of; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Glycerides, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (binding/internalization by **LSR** of; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Heart, disease  
 (failure; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Primers (nucleic acid)  
 Probes (nucleic acid)  
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (for **LSR** nucleic acid; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT cDNA sequences  
 (for lipolysis-stimulated receptors **LSR** of rat, mouse and human)

IT Lipids, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (hyperlipidemia; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Lipoproteins  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (low-d., binding/internalization by **LSR** of; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Anorexia  
 Antiarteriosclerotics  
 Antidiabetic agents

Antihypertensives  
 Antiobesity agents  
 Diagnosis  
 Digestion, biological  
 Drug screening  
 Mouse (*Mus musculus*)  
 Rat (*Rattus norvegicus*)  
     (mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Gene, animal  
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
     (mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Antibodies  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
     (monoclonal, anti-**LSR**; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Genetic polymorphism  
 Mutation  
     (of **LSR** gene, detection of; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Molecular cloning  
     (of **LSR** nucleic acid; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT DNA sequences  
     (of lipolysis-stimulated receptor **LSR** genes of human)

IT Protein sequences  
     (of lipolysis-stimulated receptors **LSR** of rat, mouse and human)

IT Mammal (Mammalia)  
 Rabbit  
     (transgenic, **LSR**-expressing; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT Lipoproteins  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
     (very-low-d., binding/internalization by **LSR** of; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT 220702-90-9P 220702-94-3P 220702-96-5P 220702-98-7P 220703-00-4P  
 220703-02-6P 220703-06-0P 220703-07-1P 220703-08-2P  
 RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
     (amino acid sequence; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and related risks or complications)

IT 169494-85-3, Leptin  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
     (binding to and modulation of **LSR** by; mammalian lipolysis-stimulated receptors **LSR** and nucleic acids and uses for diagnosing, preventing and/or treating **obesity** and

related risks or complications)

IT 69-93-2, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (hyperuricemia; mammalian lipolysis-stimulated receptors **LSR**  
 and nucleic acids and uses for diagnosing, preventing and/or treating  
**obesity** and related risks or complications)

IT 220702-87-4 220702-93-2 220702-95-4 220702-97-6 220702-99-8  
 220703-01-5 220703-03-7 220703-04-8 220703-05-9 220703-09-3  
 220703-10-6 220703-11-7 220703-12-8 220703-13-9 220703-14-0  
 220703-15-1 220703-16-2 220703-17-3 220703-18-4  
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP  
 (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL  
 (Biological study); USES (Uses)  
 (nucleotide sequence; mammalian lipolysis-stimulated receptors  
**LSR** and nucleic acids and uses for diagnosing, preventing  
 and/or treating **obesity** and related risks or complications)

IT 220608-53-7 220608-57-1  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)  
 (rat **LSR** subunit  $\alpha$  peptide; mammalian  
 lipolysis-stimulated receptors **LSR** and nucleic acids and uses  
 for diagnosing, preventing and/or treating **obesity** and  
 related risks or complications)

L2 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

TI Lipoprotein-regulating proteins for treatment of **obesity**  
 PY 1999  
 1999  
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 2002  
 2004  
 2002

IN Bihain, Bernard; Bougueleret, Lydie; Yen-Potin, Frances  
 SO PCT Int. Appl., 77 pp.  
 CODEN: PIXXD2

TI Lipoprotein-regulating proteins for treatment of **obesity**  
 AB . . . useful for modulating lipoprotein levels in vivo. The invention  
 stems from the discovery that activity of the Lipolysis Stimulated  
 Receptor (**LSR**) can be inhibited or enhanced by exogenous agents,  
 including polypeptides.

IT Proteins, specific or class  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 (AdipoQ; lipoprotein-regulating proteins for treatment of  
**obesity**)

IT Proteins, specific or class  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)  
 (ApM1; lipoprotein-regulating proteins for treatment of **obesity**  
 )

IT Lipoprotein receptors  
 RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological  
 study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC



(Process)  
 (LSR (lipolysis-stimulated receptor); lipoprotein-regulating proteins for treatment of **obesity**)

IT Antiarteriosclerotics  
 (antiatherosclerotics; lipoprotein-regulating proteins for treatment of **obesity**)

IT Kidney, disease  
 (diabetic nephropathy; lipoprotein-regulating proteins for treatment of **obesity**)

IT Eye, disease  
 (diabetic retinopathy; lipoprotein-regulating proteins for treatment of **obesity**)

IT Liver  
 (lipid partitioning between periphery and; lipoprotein-regulating proteins for treatment of **obesity**)

IT Antihypertensives  
 Antiobesity agents  
 Appetite depressants  
 Body weight  
**Obesity**  
 (lipoprotein-regulating proteins for treatment of **obesity**)

IT Fatty acids, biological studies  
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
 (lipoprotein-regulating proteins for treatment of **obesity**)

IT Lipids, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (metabolism; lipoprotein-regulating proteins for treatment of **obesity**)

IT Proteins, specific or class  
 RL: BAC (Biological activity of effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (multimerins; lipoprotein-regulating proteins for treatment of **obesity**)

IT Diabetes mellitus  
 (non-insulin-dependent; lipoprotein-regulating proteins for treatment of **obesity**)

IT Atherosclerosis  
 Hypertension  
 (**obesity**-related; lipoprotein-regulating proteins for treatment of **obesity**)

IT 220792-58-5 220792-59-6 220793-06-6 220793-07-7 220793-20-4  
 220793-21-5 220793-23-7 220793-24-8  
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)  
 (amino acid sequence; lipoprotein-regulating proteins for treatment of **obesity**)

IT 80295-33-6, Complement C1q 123423-09-6, Cerebellin  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (lipoprotein-regulating proteins for treatment of **obesity**)

IT 9004-10-8, Insulin, biological studies  
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
 (resistance; **obesity**-related; lipoprotein-regulating proteins for treatment of **obesity**)

L2 ANSWER 7 OF 9 MEDLINE on STN

TI Back disorders (low back pain, cervicobrachial and lumbosacral radicular syndromes) and some related risk factors.

PY 2001

AU Kostova V; Koleva M

SO Journal of the neurological sciences, (2001 Nov 15) 192 (1-2) 17-25.  
 Journal code: 0375403. ISSN: 0022-510X.

AB . . . this study was to estimate the prevalence rates of low back pain (LBP), cervicobrachial and lumbosacral radicular syndromes (CBR and

**LSRS**) in workers from a fertilizer plant and also to analyze the impact of several important work-related and non-occupational risk factors... vs. 10.0% in the referent group (OR 1.73, 95% CI 1.14-2.63); LBP-25.8% vs. 17.0% (OR 1.70, 95% CI 1.21-2.38) and **LSRS**-16.0% vs. 5.8% (OR 3.09, 95% CI 1.89-5.08). Gender is the second risk factor strongly related to LBP, CBS and **LSRS**. The prevalence of radicular syndromes is higher for women than for men: OR for CBS is 3.27 and 1.93 for **LSRS**. There is an interesting trend in the case of combined impact of age and gender among men and women of 40 or under and over 40--the risk, estimated by OR, is higher. In men over 40, overweight, **obesity** and heaviness of smoking, estimated by duration of smoking and daily cigarette consumption (more than 20 years and more than. . .

CT . . .  
 PP, physiopathology  
     Humans  
     Hyperlipidemia: CO, complications  
     \*Low Back Pain: EP, epidemiology  
     Low Back Pain: PP, physiopathology  
     \*Lumbosacral Plexus: PP, physiopathology  
     **Obesity: CO, complications**  
     \*Occupational Diseases: EP, epidemiology  
     Occupational Diseases: PP, physiopathology  
     Prevalence  
     \*Radiculopathy: EP, epidemiology  
     Radiculopathy: PP, physiopathology  
     Risk Factors

L2 ANSWER 8 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI **LSR** receptor, activity, cloning, and uses for diagnosing,  
 preventing and/or treating **obesity** and related risks or  
 complications.

PY 2003

AU Bihain, Bernard [Inventor, Reprint Author]; Bougueleret, Lydie [Inventor];  
 Yen-Potin, Frances [Inventor]

SO Official Gazette of the United States Patent and Trademark Office Patents,  
 (Oct 21 2003) Vol. 1275, No. 3. <http://www.uspto.gov/web/menu/patdata.html>  
 . e-file.  
 ISSN: 0098-1133 (ISSN print).

TI **LSR** receptor, activity, cloning, and uses for diagnosing,  
 preventing and/or treating **obesity** and related risks or  
 complications.

AB The present invention relates to a new complex receptor polypeptide  
**LSR** (Lipolysis Stimulated Receptor), characterized by its  
 functional activities, the cloning of the cDNAs complementary to the  
 messenger RNAs encoding each. . . of compounds which can be used as  
 medicament for the prevention and/or treatment of pathologies and/or of  
 pathogeneses such as **obesity** and anorexia, hyperlipidemias,  
 atherosclerosis, diabetes, hypertension, and more generally the various  
 pathologies associated with abnormalities in the metabolism of cytokines.

L2 ANSWER 9 OF 9 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 TI Back disorders (low back pain, cervicobrachial and lumbosacral radicular  
 syndromes) and some related risk factors.

PY 2001

AU Kostova, V.; Koleva, M. [Reprint author]

SO Journal of the Neurological Sciences, (November 15, 2001) Vol. 192, No.  
 1-2, pp. 17-25. print.  
 CODEN: JNSCAG. ISSN: 0022-510X.

AB. . . this study was to estimate the prevalence rates of low back pain  
 (LBP), cervicobrachial and lumbosacral radicular syndromes (CBR and  
**LSRS**) in workers from a fertilizer plant and also to analyze the  
 impact of several important work-related and non-occupational risk  
 factors... vs. 10.0% in the referent group (OR 1.73, 95% CI  
 1.14-2.63); LBP-25.8% vs. 17.0% (OR 1.70, 95% CI 1.21-2.38) and  
**LSRS**-16.0% vs. 5.8% (OR 3.09, 95% CI 1.89-5.08). Gender is the  
 second risk factor strongly related to LBP, CBS and **LSRS**. The

prevalence of radicular syndromes is higher for women than for men: OR for CBS is 3.27 and 1.93 for LSRS. There is an interesting trend in the case of combined impact of age and gender among men and women of 40 or under and over 40-the risk, estimated by OR, is higher. In men over 40, overweight, **obesity** and heaviness of smoking, estimated by duration of smoking and daily cigarette consumption (more than 20 years and more than. . . .

IT

IT Diseases

low back pain: nervous system disease

Low Back Pain (MeSH)

IT Diseases

lumbosacral radicular syndrome: bone disease

IT Diseases

**obesity**: nutritional disease

**Obesity** (MeSH)

IT Diseases

overweight: nutritional disease

**Obesity** (MeSH)

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:126928 CAPLUS  
 DN 130:192764  
 \*TI Mammalian lipolysis-stimulated receptors LSR and nucleic acids  
 and uses for diagnosing, preventing and/or treating obesity and  
 related risks or complications  
 IN Bihain, Bernard; Bougueleret, Lydie; Yen-Potin, Frances  
 PA Genset, Fr.; Institut National de la Sante et de la Recherche Medicale  
 (INSERM)  
 SO PCT Int. Appl., 279 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA French  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9907737	A2	19990218	WO 1998-IB1257	19980806
	WO 9907737	A3	19990610		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2767136	A1	19990212	FR 1997-10088	19970806
	FR 2767136	B1	20040827		
	FR 2767135	A1	19990212	FR 1998-5032	19980422
	FR 2767135	B1	20020712		
	CA 2274302	AA	19990218	CA 1998-2274302	19980806
	AU 9885564	A1	19990301	AU 1998-85564	19980806
	AU 745607	B2	20020321		
	EP 964870	A2	19991222	EP 1998-936611	19980806
	EP 964870	B1	20031210		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001512492	T2	20010821	JP 1999-511920	19980806
	AT 256146	E	20031215	AT 1998-936611	19980806
	EP 1375516	A2	20040102	EP 2003-102647	19980806
	EP 1375516	A3	20040609		
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	PT 964870	T	20040227	PT 1998-936611	19980806
	ES 2210786	T3	20040701	ES 1998-936611	19980806
	US 6635431	B1	20031021	US 1999-269939	19990528
	AU 770033	B2	20040212	AU 2002-29343	20020328
	AU 2002029343	A5	20020523		
	US 2004077051	A1	20040422	US 2003-650507	20030827
PRAI	FR 1997-10088	A	19970806		
	FR 1998-5032	A	19980422		
	AU 1998-85563	A	19980806		
	EP 1998-936611	A3	19980806		
	WO 1998-IB1257	W	19980806		
	US 1999-269939	A3	19990528		

=> lsr and obesity

LSR IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> s lsr and obesity

L2 9 LSR AND OBESITY

=> d l2